Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. – 4. Cancelled

5. (Currently Amended) An apparatus comprising:

a transmitter for transmitting information towards at least a first network unit and a second network unit;

a receiver for receiving information transmitted from at least one network unit; and

a media access controller for issuing data grants; wherein at least one data grant authorizes a first network unit to transmit data at a first bit-rate during at least one time-slot and at least one other data grant authorizes a second network unit to transmit data at a second bit-rate during at least one other time-slot, whereas the second bit-rate differs from the first bit-rate; wherein ~~the~~ a ratio between the second bit-rate ~~bitrate~~ and the first bit-rate ~~bitrate~~ ranges between two and six.

6. – 16. Cancelled

17. (Currently Amended) A method for allocating upstream bandwidth of a shared upstream channel of an optical network, the optical network interconnecting an apparatus with at least a first network unit and a second network unit, the method comprising the stages of:

receiving requests for transmitting information towards the apparatus ~~entity~~; and issuing data grants in response to the requests; wherein at least one data grant authorizes a first network unit to transmit data at a first bit-rate during at least one time-slot and at least one other data grant authorizes a second network unit to transmit data at a second bit-rate during at least one other time-slot, whereas the second bit-rate ~~bitrate~~ differs from the first bit-rate;

wherein a data grant authorizes a network unit to transmit at least one cell during at least one time-slot; and

wherein ~~the~~ a ratio between the second bit-rate and the first bit-rate ranges between two and six.

18. - 20. Cancelled

21. (Currently Amended) A method for allocating upstream bandwidth of a shared upstream channel of an optical network, the optical network interconnecting an apparatus with at least a first network unit and a second network unit, the method comprising the stages of:

receiving requests for transmitting information towards the apparatus ~~entity~~;

issuing data grants in response to the requests; wherein at least one data grant authorizes a first network unit to transmit data at a first bit-rate during at least one time-slot and at least one other data grant authorizes a second network unit to transmit data at a second bit-rate during at least one other time-slot, whereas the second bit-rate ~~bitrate~~ differs from the first bit-rate; and

requesting a network unit capable of transmitting at multiple bit-rates to transmit at certain bit-rate out of said multiple bit-rates;

wherein the stage of requesting is preceded by a stage of selecting said certain bit-rate in response to network unit related information previously transmitted from the network unit.

22. (Currently Amended) A method for allocating upstream bandwidth of a shared upstream channel of an optical network, the optical network interconnecting an apparatus with at least a first network unit and a second network unit, the method comprising the stages of:

receiving requests for transmitting information towards the apparatus ~~entity~~;

issuing data grants in response to the requests; wherein at least one data grant authorizes a first network unit to transmit data at a first bit-rate during at least one time-slot and at least one other data grant authorizes a second network unit to transmit data

at a second bit-rate during at least one other time-slot, whereas the second bit-rate ~~bitrate~~ differs from the first bit-rate; and

requesting a network unit capable of transmitting at multiple bit-rates to transmit at certain bit-rate out of said multiple bit-rates;

wherein the stage of requesting is preceded by a stage of selecting said certain bit-rate in response to bit-rates ~~bitrates~~ of other network units that are coupled to the apparatus.

23. (Currently Amended) A method for allocating upstream bandwidth of a shared upstream channel of an optical network, the optical network interconnecting an apparatus with at least a first network unit and a second network unit, the method comprising the stages of:

receiving requests for transmitting information towards the apparatus ~~entity~~;

issuing data grants in response to the requests; wherein at least one data grant authorizes a first network unit to transmit data at a first bit-rate during at least one time-slot and at least one other data grant authorizes a second network unit to transmit data at a second bit-rate during at least one other time-slot, whereas the second bit-rate ~~bitrate~~ differs from the first bit-rate; and

requesting a network unit capable of transmitting at multiple bit-rates to transmit at certain bit-rate out of said multiple bit-rates;

wherein the stage of requesting is preceded by a stage of selecting said certain bit-rate in response to the requests for transmitting information.

24. Cancelled